Field Report Morgan Brake National Wildlife Refuge

■ 1.0 Summary

Morgan Brake National Wildlife Refuge (NWR), 7,381 acres of hardwood bottomlands, wetland and forest located in west-central Mississippi, has no need for Alternative Transportation Systems (ATS) service in the foreseeable future, primarily because of its low level of visitation. Bus transit would be difficult to implement either as a means of access to the refuge or for circulation within the Refuge because of a lack of nearby population or activity centers which might provide appropriate service origins and the dispersed and disconnected character of the road system within the Refuge. Bicycling could be improved by paving the shoulders of the roads, although there is currently little bicycling within the refuge or in the surrounding region. Figure 1, from the refuge brochure, provides a detailed map of the refuge.

■ 2.0 Background Information

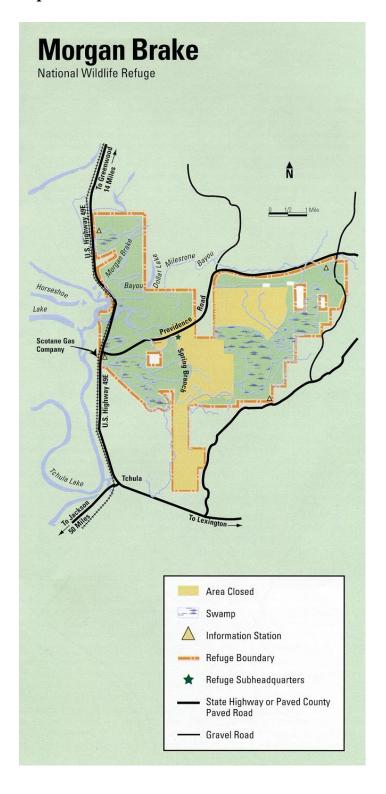
2.1 Location

Morgan Brake NWR is located at the extreme eastern edge of the Mississippi/Yazoo River Alluvial Plain between Highway 49 and the adjacent loess hills in Holmes County. Entrance to the refuge is from Highway 49E, approximately three miles north of the town of Tchula, Mississippi.

2.2 Administration and Classification

Morgan Brake is a NWR managed by the USFWS. The refuge is a satellite of the Yazoo NWR Complex and is managed by the Hillside NWR staff which also has responsibility for the Mathews Brake NWR. The Hillside "Sub-Complex" staff includes a Refuge Manager, Range Technician, and a Maintenance Worker. All funding is directed through the Yazoo NWR office in Hollandale, Mississippi. Billy Frey is the Range Technician for Morgan Brake NWR.

Figure 1. Site Map



2.3 Physical Description

Morgan Brake NWR encompasses 7,381 acres which includes 3,134 acres of bottomland hardwoods interspersed with cypress/tupelo brakes, 1,379 acres of croplands, 813 acres of aquaculture ponds, 778 acres of early successional reforestation, 677 acres of shrub swamp and marsh, 570 acres of forested uplands and 30 acres of administrative lands. There are also 57 catfish ponds on the refuge. There is no formal visitor center on the site although informational boards are sited at primary entrance points. A refuge subheadquarters, shown in Figure 2, has been established in the past year in a former private residence within the refuge.





2.4 Mission and Goals of the National Wildlife Refuge

The refuge was originally established to protect hardwood bottomlands "...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds." Since its establishment in 1977, land acquisition goals have been expanded to include a variety of habitat types including moist-soil areas, croplands, and a variety of open water sloughs and streams. Emphasis is placed on providing food for wintering waterfowl, which

utilize the refuge in large numbers. Wintering waterfowl has exceeded 100,000 ducks in recent years. Fishing and regulated hunting are allowed on the refuge. Game which may be hunted at permitted times of the year include deer, squirrel and rabbit, quail, raccoon and opossum, other furbearers, feral hogs, and ducks.

2.5 Visitation Levels and Visitor Profile

The estimated number of annual visitors in 1998 was 10,850. The majority of visitors utilize the refuge to fish in the catfish ponds. As indicated by the Range Technician, Holmes County, in which Morgan Brake NWR is located, has a predominately low-income population and these ponds therefore provide a source of food for the surrounding community. However, there is little use of the refuge by local residents for hunting. Most hunters are from the Jackson, Mississippi area, approximately 75 miles to the south. Peak visitation to the refuge is during winter months during the hunting season. Currently there are no school groups visiting the site although long-range plans identify school programs as a program objective. No camping is allowed on the refuge.

■ 3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

Access to the refuge is from U.S. Highway 49E via Providence Road, a public two-lane paved road with dirt and occasional gravel shoulders which runs east-west through the refuge. Figure 3 shows the view of Providence Road from its intersection with U.S. Highway 49E. Gravel and dirt roads intersect with Providence Road, providing access into the interior of the refuge. Because much of the refuge south of Providence Road is closed to public access, these gravel and dirt roads generally provide only restricted access to the refuge property. Some limited unpaved off-road parking is available at various locations throughout the refuge, although vehicles commonly park on the shoulder beside the road.

There is currently no signage indicating the entrance to the refuge from U.S. 49E. Property adjacent to the roadway at the refuge's entrance is under the jurisdiction of the Mississippi Department of Transportation (MSDOT), which dismantled the sign previously erected by the USFWS at this location.

No vehicle counts were available from the USFWS. Overall volumes, however, were observed to be quite light on Providence Road. Traffic volumes are much heavier on Route 49E, the primary highway connecting Jackson and Greenwood, Mississippi. Providence Road is open to the public, providing access to communities east of the refuge. As a result, much of the traffic on the road is not related to refuge operations. A large amount of refuse was observed adjacent to the road and it was noted by the Range Technician that local residents will dump garbage along the roadside to avoid having to pay fees at municipal landfills.

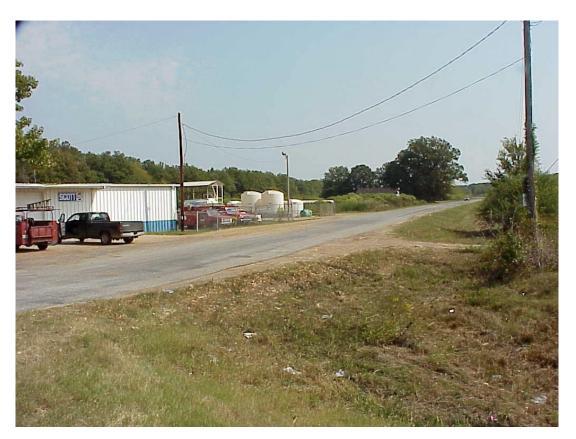


Figure 3. Providence Road from U.S. Highway 49E

The Range Technician indicated that an "Auto Tour" of the refuge has been conceptually developed that would direct visitors to areas of natural interest within the refuge. The Auto Tour route would travel through some areas which are currently restricted and, in part, utilize gravel roads. However, due to a lack of staff resources to develop the program and poor road conditions, this concept has not progressed toward implementation.

3.2 Community Development Conditions, Issues and Concerns

As indicated above, the community adjacent to Morgan Brake is predominantly low-income and primarily agricultural. According to data from the U.S. Census, as of 1995, 44.9 percent of Holmes County was estimated to live in poverty and the median house-hold income was \$14,382. In general, the refuge is not heavily utilized by local residents and use by others from the greater surrounding region is also limited. As indicated by the refuge staff, there is little which the refuge offers that is not otherwise available to local residents in their more immediate surrounding. Other nearby facilities which offer more recreational opportunities (camping, boating, and picnicking) compete with the refuge and these facilities are generally closer to residential concentrations. Also, unlike areas further to the south and west, there is little tourism in the area which might otherwise represent a potential market for expanded use of the refuge.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

The refuge is exceedingly rich in wetlands and hardwood bottom lands (see Figures 4 and 5). No specific environmental problems were noted other than the problem of dumping on public land. Morgan Brake has been able to maintain a high level of water quality although other wildlife refuges within the Yazoo complex have experienced some degradation due to runoff of agricultural chemicals which has resulted in periodic fishing bans. It was also noted that feral hogs have significantly damaged areas of wildlife habitat, particularly where grain crops have been planted as a source of feed for waterfowl.



Figure 4. View of Wetlands and Forest Habitat

3.4 Recreation Conditions, Issues and Concerns

The primary recreational activity at this Refuge is fishing and hunting. Although the facility offers excellent bird watching opportunities, this does not attract many visitors. In general it was noted that it is difficult to access prime viewing areas because of the largely undeveloped nature of the Refuge and the fact that much of the refuge is closed to the public. The refuge has worked with the Audubon Society in Jackson to obtain volunteer assistance in managing occasional birding activities.



Figure 5. View of Swamp Habitat

■ 4.0 Planning and Coordination

4.1 Unit Plans

No information was obtained regarding any planning efforts underway specific to Morgan Brake or the Yazoo complex as a whole. An application for funding to perform road repairs at the Hillside NWR has been submitted to the Federal Highway Administration under the Public Lands Highway Discretionary Act and is awaiting a decision.

4.2 Public and Agency Coordination

There is no planning process underway for this Refuge and no major issues to be resolved, therefore public communication is limited to the normal dissemination of information. However, it was noted by the Range Technician that there are limited outlets for this information in the immediate community. Also, as noted above, there has been an issue

regarding signage on the public right-of-way, resulting in the MSDOT removing the Morgan Brake NWR sign at the entrance to the refuge.

5.0 Assessment of Need

5.1 Magnitude of Need

The need for alternative transportation to and/or within the Morgan Brake NWR is very low at this time. The level of visitation is modest, and the greatest transportation need seems to be for better information indicating the entrance to the facility. This could encourage increased visitation drawn from Route 49E traffic. In the future, an "auto tour" with interpretive signage would provide an enhanced means of accessing the refuge's prime wildlife habitat. However, it is unlikely that given the facility's location that the level of demand for such an amenity would warrant alternative transportation services in the foreseeable future.

5.2 Feasible Alternatives

Transit services would be difficult to implement at Morgan Brake because of the dispersed and disconnected character of the road system, the volume of visitorship, and the density and location of population centers outside of the refuge. Bicycling could be improved by paving the shoulders of the roads, however.

■ 6.0 Persons Interviewed

Tim Wilkins, Refuge Manager, Yazoo NWR Complex

Billy Fray, Range Technician, Morgan Brake NWR